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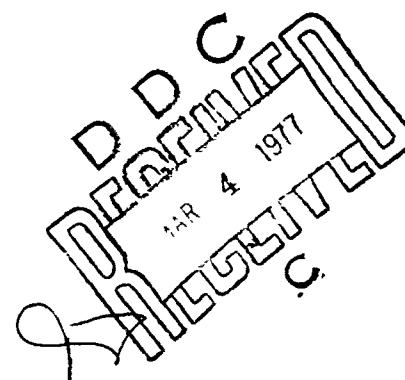
ROTC-PROGRAM DETERMINANTS OF CADETS' CAREER COMMITMENT

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TECHNICAL REPORT

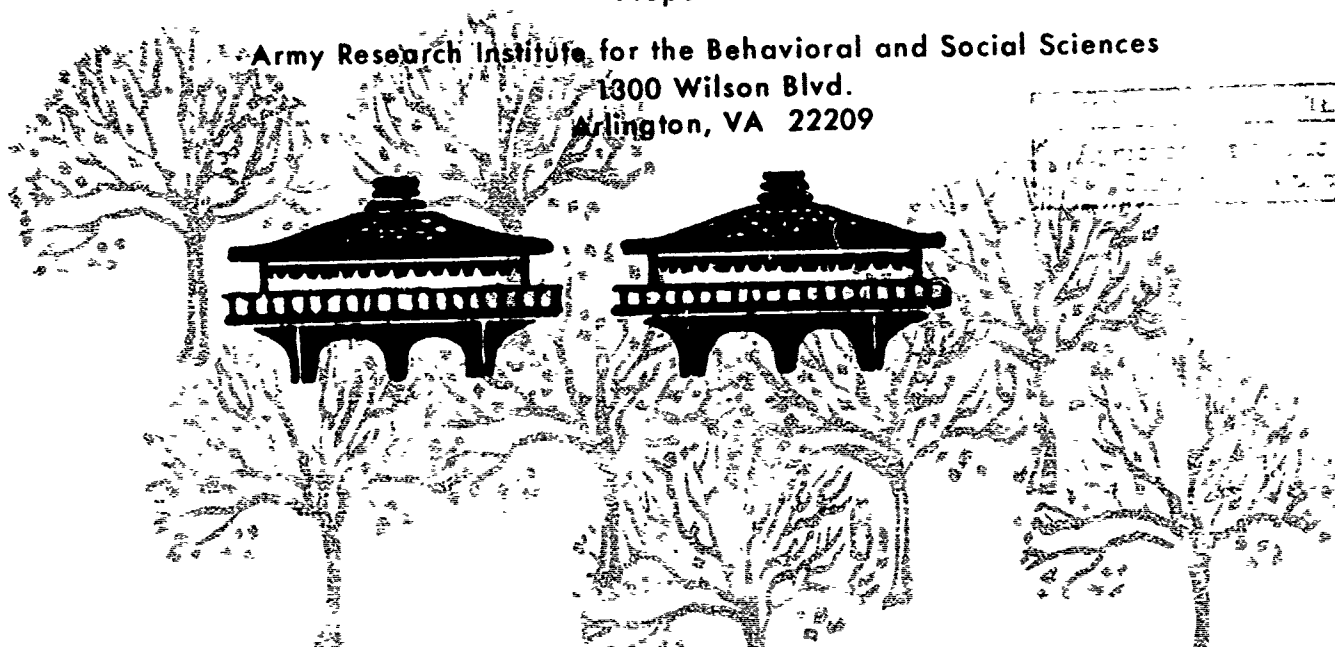
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July 1976



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cadets: new programs; small programs; programs in which instructors reported spending outside-class time with cadets; programs fostering Self-Discovery and Independence; programs in which instructors were not burdened by excessive administrative responsibilities; programs offering innovative extracurricular enrichment activities and mini-courses. Results were interpreted in the context of the quantity vs. quality tension facing many ROTC programs. Implications of the study for future research into ROTC-program determinants of cadets' career commitment were also spelled out.

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ROTC-PROGRAM DETERMINANTS OF
CADETS' CAREER COMMITMENT

J.J. Card

July 1976

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BRIEF

In 1974-75 the American Institutes for Research conducted a two-year study for the U.S. Army Research Institute aimed at developing and testing a model of career commitment in the young adult years. The ROTC route to becoming an Army officer was used as the illustrative career path for model development and validation. Nationwide stratified random samples of 1089 high school seniors from 12 high schools (102 of whom were in Junior ROTC), 1633 college students from 11 colleges (754 of whom were in college ROTC), and 634 ROTC-graduate Army officers in their period of obligated Army service took part in the study.

Data from these respondents were initially analyzed with the goal of uncovering the demographic and socio-psychological characteristics associated with participation in and commitment to a ROTC/Army career. Results were presented in the project's final report (cf. Card, *et al.*, Development of a ROTC/Army Career Commitment Model. Palo Alto: American Institutes for Research, 1975).

For purposes of the present study, these data were re-analyzed to determine whether any evidence of *ROTC-program influences* on cadets' career commitment could be found. The re-analysis showed that significant differences in commitment, attitudes toward ROTC, and attitudes toward the Army did in fact exist among cadets enrolled in the 11 participating ROTC programs. A new survey was conducted with the goal of exploring the nature and extent of these program-related influences on commitment. Forty ROTC instructors from the 11 participating colleges took part in the new survey.

The following aspects of the ROTC program were found to be related to cadets' commitment to an Army officer career:

1. Age of program. Newer programs had more highly committed cadets than older programs.
2. Size of program. Smaller programs (in terms of number of instructors, and number of cadets in Basic and Advanced ROTC) had more highly committed cadets than larger programs.
3. Relationship between cadre and cadets. Programs in which instructors reported spending outside-class time with cadets had more highly committed cadets than other programs.
4. Member vs. leader orientation of program. Member-oriented programs (programs characterized by an emphasis on Self-Discovery and Independence) had more highly committed cadets than leader-oriented programs (programs characterized by an emphasis on Leader Control and Leader Support).

5. Administrative load on cadre. Programs in which instructors reported excessive administrative ("paperwork") responsibilities tended to have cadets with low commitment to an Army officer career.
6. Extracurricular enrichment activities and mini-courses. These activities and mini-courses were cited by many instructors as contributing to the attraction and retention of highly qualified cadets.
7. ROTC minimum-enrollment requirements. These requirements, calling for the closing down of programs failing to recruit a given minimum number of cadets, were cited by many instructors as contributing to the "poor quality" of enrolled cadets.

These findings should be viewed with caution in light of the small number of programs (eleven) participating in the study. However, some tentative inferences and recommendations can be made.

Findings 2, 3, 5, and 7 point to the quality vs. quantity tension that besets many ROTC programs. All programs are under pressure to meet minimum enrollment requirements (7). Programs that are successful recruitment-wise (2) develop an administrative overload for their staff (5) that keeps staff from spending time with cadets. The cadre-cadet relationship is a very important determinant of cadets' commitment (3). And so cadets from large ROTC programs are not as committed to ROTC/Army as are cadets from small programs.

Present ROTC recruitment policies call for enrolling as many cadets as possible in Basic ROTC, in the hope that a sufficient number of these will be motivated enough to join the Advanced program. Findings from the present study indicate that an alternative policy worth investigating is to shift the emphasis in recruitment and selection from "number who enroll" to "number who will stay." Correlates of commitment spelled out in a previous report (Card, *et al.*, 1975) could be used to aid ROTC cadet selection procedures. Then a concerted effort by ROTC cadre could be directed toward spending more time with enrolled cadets. Such selectivity and time investment thrusts should pay off in the form of higher retention rates.

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INTRODUCTION

This report is part of a programmatic research effort aimed at understanding the determinants of ROTC cadets' commitment to an Army officer career.

A recently completed study¹ developed and tested a model of ROTC/Army career commitment using input from: (a) a seven-member National Advisory Panel made up of experts in the areas of career development and military career decision making; (b) a survey of the career development and career commitment literature; (c) in-depth interviews with 135 ROTC cadets and Army officers; and (d) data from a nationwide survey of 1089 high school seniors, 1633 college students (754 in ROTC; 879 not in ROTC), and 634 ROTC-graduate Army officers in their period of obligated Army service.

The study focused primarily on individual determinants of career commitment, i.e., on factors in an individual's demographic background and socio-psychological profile predisposing him/her to join ROTC and, having joined, to remain in the ROTC/Army career path. Environmental determinants of commitment--i.e., the influence of societal (political, socioeconomic) or group (ROTC program) factors on cadets' commitment--were included in the career commitment model but were not systematically investigated in the study.

Environmental determinants of commitment are more difficult to study than individual determinants. For example, the influence of political and socioeconomic factors on cadets' commitment cannot be studied without longitudinal data, because with data gathered at a single point in time there is no predictor variance to study and explain. In the case of ROTC program determinants of commitment, there are logistic and cost problems associated with obtaining an adequate "n." For example, the recently completed study surveyed a nationwide sample of 754 ROTC college cadets from 11 colleges. In studying individual determinants of cadets' commitment, the operative "n" is large: 754. When the focus shifts to studying ROTC-program determinants of cadets' commitment, the operative "n" shrinks to a mere 11.

Despite this limitation, data from the nationwide survey were subjected to additional analysis to investigate whether any evidence of program influences on cadets' commitment could be found.² Knowledge of these influences could provide ROTC cadre and policymakers with information on how ROTC programs can be improved to enhance recruitment and retention of qualified cadets.

¹Card, J.J., Goodstadt, B.E., Gross, D.E., and Shanner, W.M. Development of a ROTC/Army Career Commitment Model. Final Report, Contract No. DAHC-19-74-C-0017. Palo Alto, Ca.: American Institutes for Research, 1975.

²Because the recently completed study did not involve longitudinal data collection, it could not shed light on societal influences on cadets' commitment.

The additional analyses consisted primarily of shifting the unit of data analysis from the individual cadet to the ROTC program in which he/she was enrolled. Tables 1 and 2 present results of these analyses. Data in these tables indicate a strong effect of program on commitment:

1. A significant difference ($p < .001$) was found among the commitment means of cadets attending the 11 programs (see Table 1).
2. Significant differences among the 11 program were, in addition, found for:
 - a. 6 of the 7 career commitment items included in the survey;
 - b. 21 of the 26 Beliefs about ROTC included in the survey; and
 - c. 19 of the 28 Beliefs about the Army included in the survey. (Table 2)

METHOD

To further explore the nature and extent of ROTC program influences on cadets' career commitment, a new survey was conducted among ROTC instructors at the 11 colleges that had participated in the original study.

The Survey Questionnaire

In constructing the new survey questionnaire, an attempt was made to cover the major components of the ROTC program. First, the major program components were listed: Cadre; Cadets; Curriculum/Materials; Program Atmosphere. Then each component was further broken down into sub-components hypothesized to impinge on cadets' career commitment. For example, the following aspects of the ROTC cadre or instructional staff were studied for their influence on cadets' commitment: number of years experience in ROTC; number of years experience as an Army officer; extent of involvement in campus activities; recruitment efforts; competence and over-all evaluation.

A similar decomposition of the school and community environments was conducted. Thus the following aspects of the school environment were studied for their impact on cadets' commitment to an Army officer career: political climate of school; support/opposition to ROTC program by administration, faculty and student body; and integration of the ROTC program with the rest of the school environment. The following aspects of the community environment were studied for their impact on cadets' commitment: political climate of community; and support/opposition to ROTC program by community members.

TABLE 1
COMMITMENT SCORES OF COLLEGE ROTC STUDENTS,
BY SCHOOL ATTENDED

COLLEGE NUMBER	SCHOOL STRATIFICATION CLASSIFICATION			NUMBER OF ROTC CADETS PARTICIPAT- ING IN STUDY	ROTC/ARMY COMMITMENT SCORES	
	ROTC REGION	OWNERSHIP	SIZE		MEAN ^a	STANDARD DEVIATION
1	1	Private	Medium	19	28.54	7.56
2	1	Private	Small	44	29.60	5.16
3	2	Public	Medium	85	30.25	6.55
4	1	Public	Medium	35	32.71	5.02
5	1	Public	Small	156	30.02	7.01
6	4	Public	Large	76	32.33	5.22
7	1	Public	Small	138	28.51	7.58
8	3	Public	Medium	62	31.39	5.90
9	3	Public	Medium	51	32.31	6.44
10	2	Public	Large	65	31.19	5.67
11	2	Private	Small	23	32.59	4.29

Note. The eleven commitment means are significantly different from one another:

$$F = 3.55; \text{ df} = 10; p < .001.$$

^aFor the college ROTC sample, career commitment could range from 8 - 40.

TABLE 2

ROTC PROGRAM DIFFERENCES
IN CAREER COMMITMENT, BELIEFS ABOUT ROTC,
AND BELIEFS ABOUT THE ARMY

NAME OF SCALE	NO. OF ITEMS IN SCALE	NO. OF ITEMS FOR WHICH SIGNIFICANT ($p < .05$) DIFFERENCES WERE FOUND AMONG 11 ROTC PROGRAMS	
		n	% ^a
Career Commitment	7	6	85.7
Beliefs about ROTC	26	21	80.8
Beliefs about the Army	28	19	67.9

^aIf chance alone were operating, this figure would be $\leq 5\%$.

Table 3 presents the results of these decomposition efforts by giving the ROTC program components included in the questionnaire. The table also maps each component to its corresponding operationalization as a questionnaire item. The interested reader is referred to Appendix A for perusal of actual questionnaire items. Both objective-type as well as open-ended questions were included in the questionnaire.

The Instructor Respondent Sample

Five questionnaires were mailed to each ROTC program whose cadets had participated in the original nationwide survey, a total of 55 questionnaires in all. One program had only three instructors, so a total of 53 useable questionnaires were circulated. Of these 42 were completed and returned (two too late for inclusion in the data analysis), a return rate of 79.2%.³

Table 4 gives the distribution, by ROTC program affiliation, of the 40 ROTC instructors whose questionnaire responses were subjected to data analysis. In Table 4, the instructors are classified as representing "low-commitment," "medium-commitment," or "high-commitment" programs, according to the mean commitment scores of cadets in their programs, as gleaned from the recently completed study.⁴ Note that the highest rate of return (90%) was obtained from instructors from high-commitment programs.

RESULTS

Before proceeding to a discussion of survey results, one limitation of the present study should be pointed out again. In examining program

³This high return rate was obtained without the help of a single reminder or follow-up notice.

⁴In the recently completed study, cadets' commitment to a ROTC/Army career, was measured as a composite scale variable encompassing several indices of commitment, e.g.,: intention to remain in ROTC through the senior year, intention to apply for a Regular Army commission, intention to serve in the Army beyond the period of obligated Army service, and intention to make a career of the Army. The mean commitment scale score of cadets in the 11 participating programs was computed (see Table 1), and the programs rank-ordered according to this mean score. The four highest-mean programs were then designated as "high-commitment" programs; the four lowest as "low-commitment" programs; and the remaining three as "medium-commitment" programs.

TABLE 3
 ROTC PROGRAM COMPONENTS THAT
 POTENTIALLY AFFECT CADETS' COMMITMENT
 TO AN ARMY OFFICER CAREER

PROGRAM COMPONENTS	ITEM NOS. IN QUESTIONNAIRE
I. Cadre	
A. Number of years experience in ROTC	6
B. Number of years experience as an Army officer	8
C. Extent of involvement in campus activities	9
D. Recruitment efforts	13; 14 ^a
E. Competence and over-all evaluation	10-a; 11-a ^a
II. Cadets	
A. Participation in non-mandatory ROTC activities	10-f
B. Commitment	10-g; 15
C. Competence and over-all evaluation	10-e; 11-c ^a
III. Curriculum and Materials	
A. Relevance to Army officer career	10-d
B. Degree/nature of innovativeness	18 ^a
C. General quality and over-all evaluation	10-c; 11-b ^a
IV. ROTC Program Atmosphere	
A. Age of program	3
B. Size of program (number of cadets; instructors; in relation to size of student body)	4, 5
C. Goals of program	
1. What goals are	19 ^a
2. How well goals are being met	20
3. Factors keeping program from meeting goals better	21 ^a
D. Social climate	10-b; 10-h; 11-d ^a ; 22
E. Intellectual climate	10-i; 11-d ^a ; 12
F. Factors producing high/low commitment in cadets	16 ^a ; 17 ^a
G. General quality and over-all evaluation	10-j; 11-e ^a
V. School Environment in Relation to ROTC Program	
A. Political climate of school	23
B. Support/opposition to ROTC program by administration, faculty, students	24; 25; 26; 27; 31
C. Integration of ROTC program with rest of school environment	28
VI. Community Environment in Relation to ROTC Program	
A. Political climate of community	29
B. Support/opposition to ROTC program by community members	30

Note. The full questionnaire is given in Appendix A.

^aThese items were asked as open-ended items in the questionnaire.

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^aThese items were asked as open-ended items in the questionnaire.

determinants of commitment, the "n" on which findings are based is, in a sense, not 40 (the number of instructors participating in the study), but 11 (the number of ROTC programs represented by the 40 instructors). Thus the findings to be presented should be replicated before they can be viewed as definitive.

What should emerge from this and the preceding report (Card, et al, 1975) is a growing mosaic, with firm theoretical and empirical underpinnings, on which future research and policy-making in this important area of ROTC/Army career commitment can be based.

In order to highlight methodological implications of obtained findings, results will be discussed according to questionnaire item-type, instead of the program-component sequence given in Table 3. First, responses to objective items pertaining to the demographic characteristics of the ROTC program will be presented. Then responses to rating-type objective items, behaviorally-based objective items and open-ended questions will be discussed in turn.

Responses to Objective Items Dealing with Demographic Characteristics of ROTC Program

The first set of items analyzed were those pertaining to the demographic make-up of the program, e.g., its age and size. Table 5 presents the relationships obtained between these demographic characteristics and the commitment of ROTC cadets enrolled in the program. It was found that:

1. Newer programs had more highly committed cadets than older programs.
2. Smaller programs (in terms of number of instructors, and number of cadets in Basic and Advanced ROTC) had more highly committed cadets than larger programs.
3. There was no relationship between number of years of experience of the ROTC instructor staff and cadets' commitment.

Responses to Rating-type Objective Items

Instructors were asked to rate ten components of their ROTC program-- competence of ROTC teaching staff, morale of teaching staff, quality of

TABLE 5
DEMOGRAPHIC CHARACTERISTICS
OF ROTC PROGRAM
AND COMMITMENT

Demographic Characteristics of ROTC Program	Group Means			Correlation with Mean Commitment Score of Cadets
	Low- Commitment Programs	Medium- Commitment Programs	High- Commitment Programs	
No. of years program has been in existence	58.78	44.90	15.89	-.41**
No. of instructors in program	8.92	8.60	6.06	-.45**
No. of cadets in Basic ROTC	289.11	351.60	106.56	-.46**
No. of cadets in Advanced ROTC	100.67	54.70	28.72	-.68***
No. of years instructors have been affiliated with ROTC	2.25	2.00	2.50	.06
No. of years instructors have been Army officers	12.64	15.00	14.06	.10

** $p < .01$

*** $p < .001$

curriculum and materials, relevance of curriculum to an Army officer career, competence of cadets, participation by cadets in non-mandatory ROTC-related activities, commitment of cadets to an Army officer career, social climate, intellectual climate, and over-all quality of ROTC program--using the following rating categories:

1. Exceptional (Top 20% in country)
2. Very Good (Top 40% in country)
3. Above Average
4. Below Average (Bottom 40%)
5. Poor (Bottom 20%)

They were also asked to rate student body, administration, faculty, and community support of their ROTC program, using five response categories ranging from "exceptional" to "poor."

Systematic but unexpected findings were obtained from these subjective ratings. Results from these items will thus be discussed as a group, separately from results from other items in the questionnaire.

Figure 1 portrays the mean ratings assigned to the 10 ROTC program components by instructors from low-commitment, medium-commitment, and high-commitment programs. In Figure 1, the program components are ordered according to decreasing favorability of ratings assigned by ROTC instructors. Also, the structure of the chart's ordinate is reversed, so that the good (1) ratings are plotted higher than the poor (5) ratings.

Instructors assigned highest ratings to their personal competence, and lowest ratings to their cadets' competence and commitment to ROTC/Army.⁵ All ratings were extremely high, with not a single mean falling below the "average" rating of 3.

⁵It would be interesting to compare these views with those held by cadets in the program. At the request of the project monitor, a similar questionnaire on "ROTC-program Determinants of Cadets' Career Commitment" was circulated among a small sample of 200 cadets from the 11 participating institutions. These data are available for processing, should funds be available.

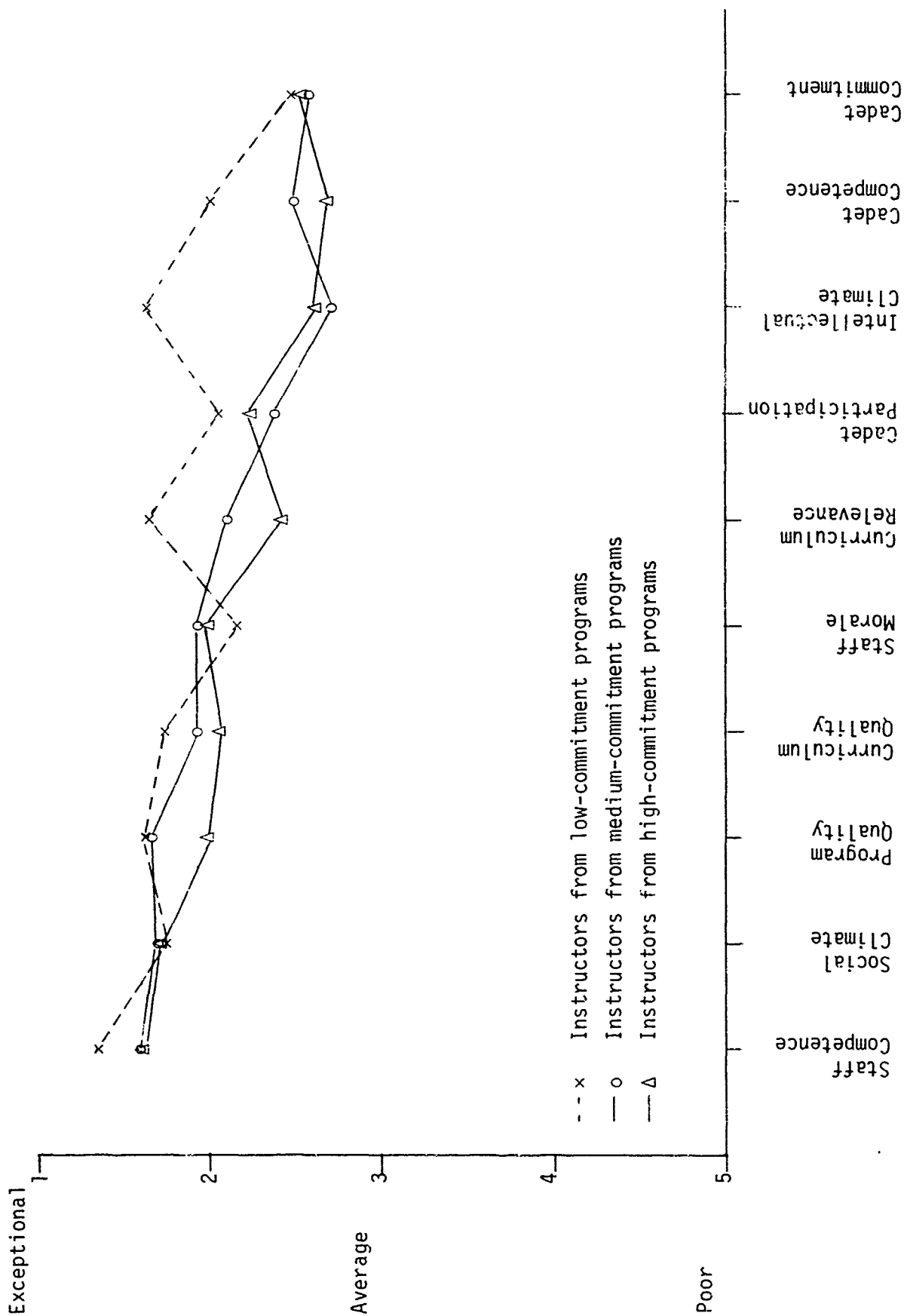


Figure 1
MEAN INSTRUCTOR RATINGS OF ROTC PROGRAM COMPONENTS

Instructors' mean ratings of school and community support of their ROTC program are portrayed in Figure 2. As with the case with Figure 1, the four groups rated are ordered on the chart's abscissa according to decreasing amount of ROTC program support, as perceived by the instructor respondent sample. Also the structure of the chart's ordinate is reversed so that favorable support (1) ratings are plotted higher than unfavorable (5) ratings.

Figure 2 shows that ROTC instructors attributed greatest support to their colleges' administration, and least support to their colleges' student body. This was true for each of the 11 schools surveyed, without exception. The finding is not surprising in light of anti-military attitudes that surfaced among college students during the recent Vietnam War. It is also consistent with findings reported in Card, *et al.*, 1975, in which both ROTC as well as non-ROTC students attributed more favorable military attitudes to their parents than to their peers.

Interesting differences in the ratings of instructors from high- and low-commitment programs emerged (see Figures 1 and 2). If chance alone were operating, one would expect that of the 14 components rated in the figures, seven would be rated higher by instructors from low-commitment programs, and seven would be rated higher by instructors from high-commitment programs. Instead, the obtained frequencies are 12 and two respectively ($\chi^2 = 7.1$, $df = 1$, $p < .01$). Instructors from low-commitment programs appear to have a tendency to assign higher ratings than instructors from high-commitment programs.

A Check on Bias Due to Social Desirability

These results led to the hypothesis that instructors from low-commitment programs were being unrealistic in their ratings, and were trying hard (consciously or not) to portray their programs in a more favorable or "socially desirable" light than the truth warranted.

To check on this hypothesis, instructors' estimates of their cadets' commitment⁶ were plotted separately by actual commitment level of cadets in their programs. Results are portrayed in Figure 3.

⁶These estimates were gleaned from responses to the following item: "How would you assess the commitment of your cadets to an Army officer career? Please answer this question by estimating the following percentages: (a) Percentage of your cadets in Basic ROTC who, you believe, will join Advanced ROTC; (b) Percentage of your cadets in Advanced ROTC who, you believe, will stay in the Army beyond their period of obligated Army service; (c) Percentage of your cadets in Advanced ROTC who, you believe, will make a career of the Army (serve at least 10 years in the Army)."

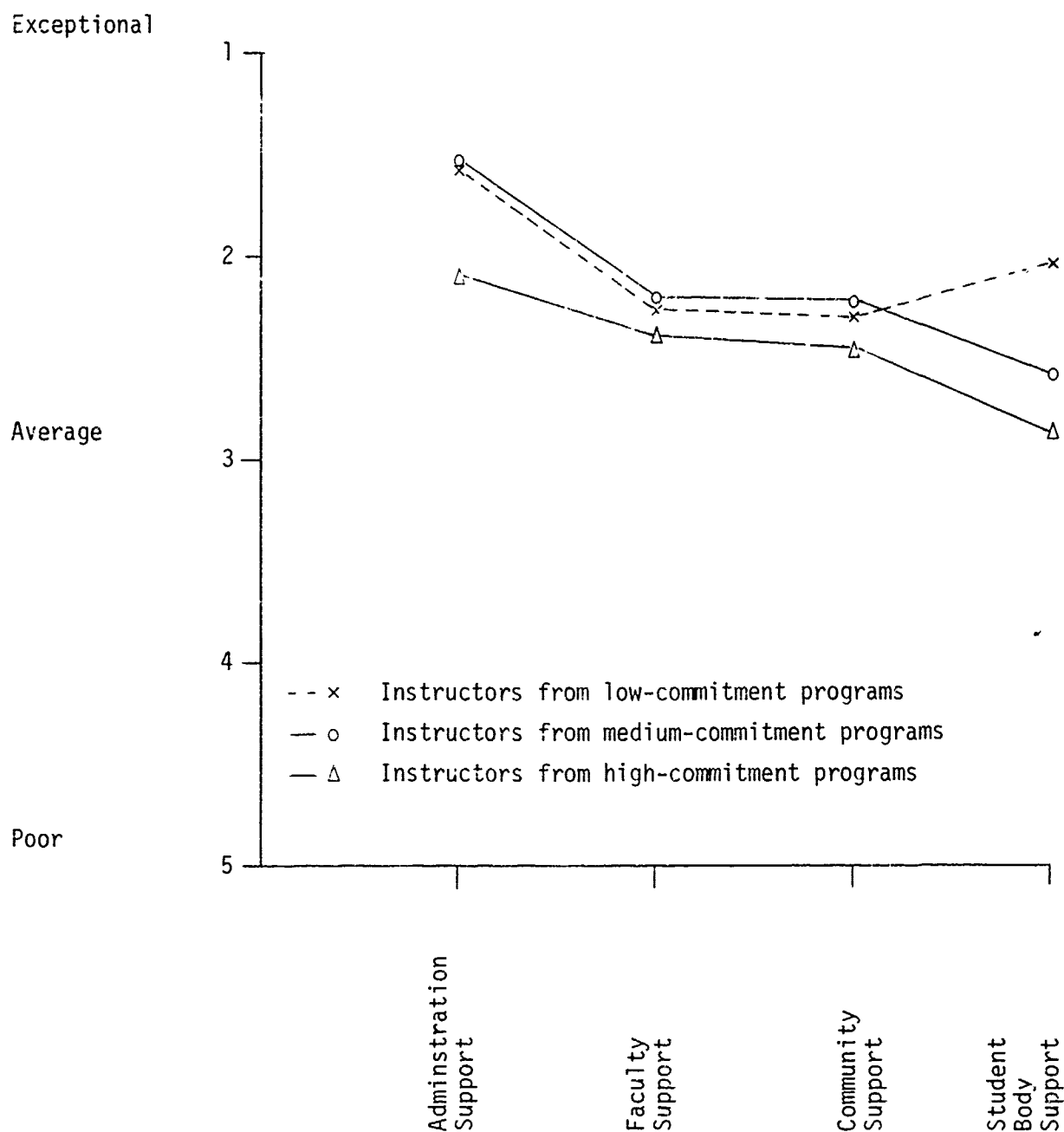


Figure 2

MEAN INSTRUCTOR RATINGS OF SCHOOL AND COMMUNITY
SUPPORT OF ROTC PROGRAM

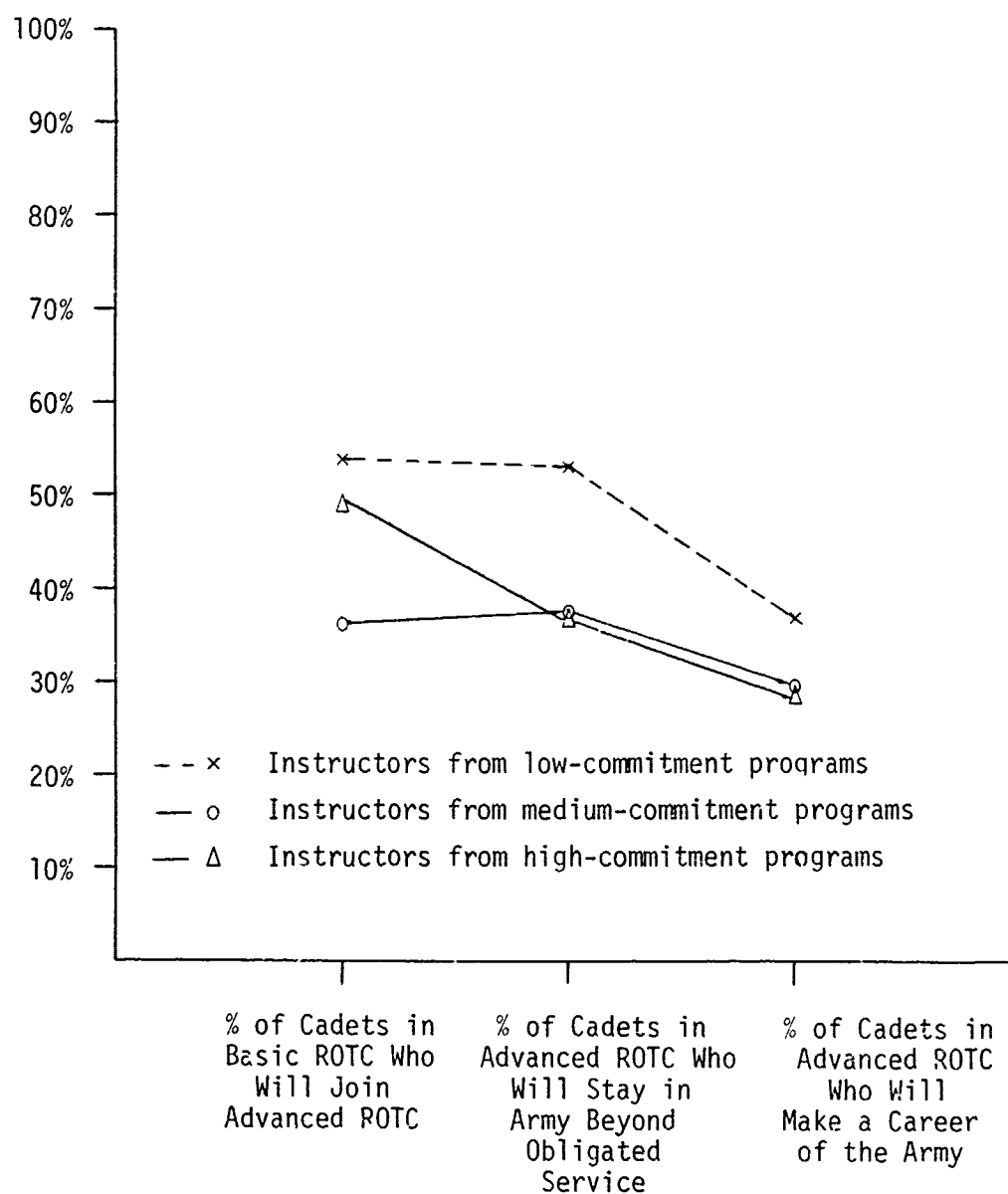


Figure 3
MEAN INSTRUCTOR ESTIMATES OF CADETS' CAREER COMMITMENT

As hypothesized, instructors from low-commitment programs attributed much greater career commitment to their cadets than did instructors from high-commitment programs.

An index of social desirability was computed by subtracting actual career commitment scale scores (as gleaned from cadets) from estimated career commitment percentages (as gleaned from instructors).⁷ The distribution of this index by program commitment level is shown in Table 6. The mean social desirability score of instructors from low-commitment programs was much larger than the mean social desirability score of instructors from medium- and high-commitment programs.

Implications

These results have two implications, the first methodological, the second substantive.

1. ROTC instructors may not be a good source of information for program evaluation purposes, if the evaluation measures are in the form of subjective rating scales. Ratings assigned by instructors from low-commitment programs appear to be biased in the socially desirable direction. The next sections will present two other item types--behaviorally based objective items and open-ended items--that appear to work better with this group of respondents.
2. The unrealistic responses obtained from instructors in low-commitment programs may in fact reflect personality characteristics of these instructors that help produce low commitment in cadets. Thus the hypothesis may be raised that instructors from low-commitment programs are not as sensitive to their cadets' needs and dissatisfactions as are instructors from high-commitment programs. These low-commitment instructors may similarly not be as capable of making appropriate decisions based on a critical and objective assessment of the situation. Future research can test the validity of these hypotheses.

Responses to Behaviorally-Based Objective Items

In addition to the just-described rating-type items, instructors were also given a 40-item true-false scale measuring ten characteristics of their group environment. Table 7 presents a description of the 10 characteristics measured: Cohesion, Leader Support, and Expressiveness (all relating to the "relationship" dimension); Independence, Task

⁷The actual and estimated commitment scores on which the social desirability index was computed are not based on comparable measures. The former was computed via an eight-item scale, the latter by averaging instructors' answers to the three percentage items given in Footnote 6. Thus the social desirability index is meaningful in terms of its magnitude, but has no further interpretation.

TABLE 6

INSTRUCTOR SOCIAL DESIRABILITY SCORES,
BY COMMITMENT LEVEL OF CADETS IN THEIR PROGRAM

PROGRAM AFFILIATION OF INSTRUCTORS	NO. OF INSTRUCTORS	SOCIAL DESIRABILITY SCORES ^a	
		MEAN	STANDARD DEVIATION
Low-Commitment Programs	12	17.25	19.78
Medium-Commitment Programs	10	3.30	13.80
High-Commitment Programs	18	5.59	19.68

^aSocial Desirability = Estimated Commitment of Cadets minus Actual Commitment of Cadets (details explained in text).

TABLE 7

GROUP ENVIRONMENT SCALE SUBSCALE DESCRIPTIONS

Relationship Dimensions	
1. Cohesion	The extent of members' involvement and participation in the group; of their affiliation and commitment to the group; of the help, manifest concern, and friendship displayed to each other.
2. Leader Support	The amount of help, manifest concern and friendship displayed by the leader to the members.
3. Expressiveness	The extent to which freedom of action and expression of feelings are encouraged.
Personal Growth Dimensions	
4. Independence	The extent to which the group tolerates and/or encourages independent action and expression in its members.
5. Task Orientation	The degree of emphasis on practical, concrete, "down-to-earth" tasks, decision-making, or training.
6. Self-Discovery	The extent to which the group tolerates and/or encourages members' revelation and discussion of personal detail.
7. Anger and Aggression	The extent to which the group tolerates and/or encourages open expression of negative feelings and inter-member disagreement.
System Maintenance and System Change Dimensions	
8. Order and Organization	The degree to which the activities of the group are formalized and structured; the degree of explicitness of group rules, norms, and sanctions.
9. Leader Control	The extent to which the tasks of directing the group, making decisions, and enforcing rules are assigned to the leader.
10. Innovation	The extent to which the group tolerates and/or facilitates diversity and change in its own functions and activities.

Orientation, Self-Discovery, and Anger/Aggression (all relating to the "personal growth" dimension); Order/Organization, Leader Control, and Innovation (all relating to "system maintenance and change"). A more complete description of the Group Environment Scale (GES) and subscales--including the scale's rationale, development procedures, norms, and other test statistics--may be found in Moos, R.H., Insel, P.M., and Humphrey, B. Preliminary Manual for Family Environment Scale, Work Environment Scale, Group Environment Scale. Palo Alto: Consulting Psychologists Press, Inc., 1974.

Items in the GES scale were formulated to express environmental press. For example, a press toward Cohesion is inferred from the item "Members put a lot of energy into this group." A press toward Independence is inferred from the item "Individual talents are recognized and encouraged in this group." Thus all GES items are behavioral in orientation, and are based on a more concrete referent than were the subjective rating items discussed in the previous section.

Table 8 presents the coefficient alpha reliability index computed for the GES scale and its ten subscales. The subscales varied a lot in reliability (probably due to the small number of items in each subscale), with coefficient alpha ranging from .17 on the Innovation subscale to .85 on the Leader Support subscale. Reliability of the total GES scale was quite high: .84.

Figure 4 presents instructor-ascribed scores on the 10 GES subscales, by commitment level of program.⁸ The subscales are ordered on the abscissa according to the extent to which they could discriminate between high-commitment and low-commitment programs. Thus the subscales to the left of Figure 4 (Self-Discovery, Independence, etc.) represent characteristics found to a greater extent in high-commitment than in low-commitment programs. The subscales on the right of Figure 4 (Leader Control, Leader Support, etc.) represent characteristics found to a greater extent in low-commitment than in high-commitment programs.

It was found that:

1. As expected, instructors from high-commitment programs assigned more favorable ratings to their ROTC group environment than did instructors from low-commitment programs. This was true for seven of the ten subscales studied.
2. The dimensions most characteristic of ROTC programs as a whole (disregarding individual program commitment levels for the moment) were Independence and Task Orientation. All programs assigned a mean rating of over 3.0 (out of a possible 4.0) to these two dimensions.
3. The dimensions least characteristic of ROTC programs as a whole were Self-Discovery and Anger/Aggression.

⁸ There were 4 items in each GES subscale. Thus the range of possible scores on each subscale was 0-4.

TABLE 8
COEFFICIENT ALPHA RELIABILITY
FOR THE GROUP ENVIRONMENT SCALE
AND ITS TEN SUBSCALES

Name of Scale	No. of Items	Coefficient Alpha
<u>GES Subscales</u>		
Cohesion	4	.83
Leader Support	4	.85
Expressiveness	4	.31
Independence	4	.23
Task Orientation	4	.74
Self-Discovery	4	.51
Anger and Aggression	4	.82
Order and Organization	4	.68
Leader Control	4	.41
Innovation	4	.17
<u>Total GES Scale</u>	40	.84

Note -- Coefficient alpha = $\frac{k}{k-1} \left(1 - \frac{\sum \sigma_i^2}{\sigma_y^2} \right)$

where: k = number of items in the scale

$\sum \sigma_i^2$ = sum of item variances

σ_y^2 = variance of total score

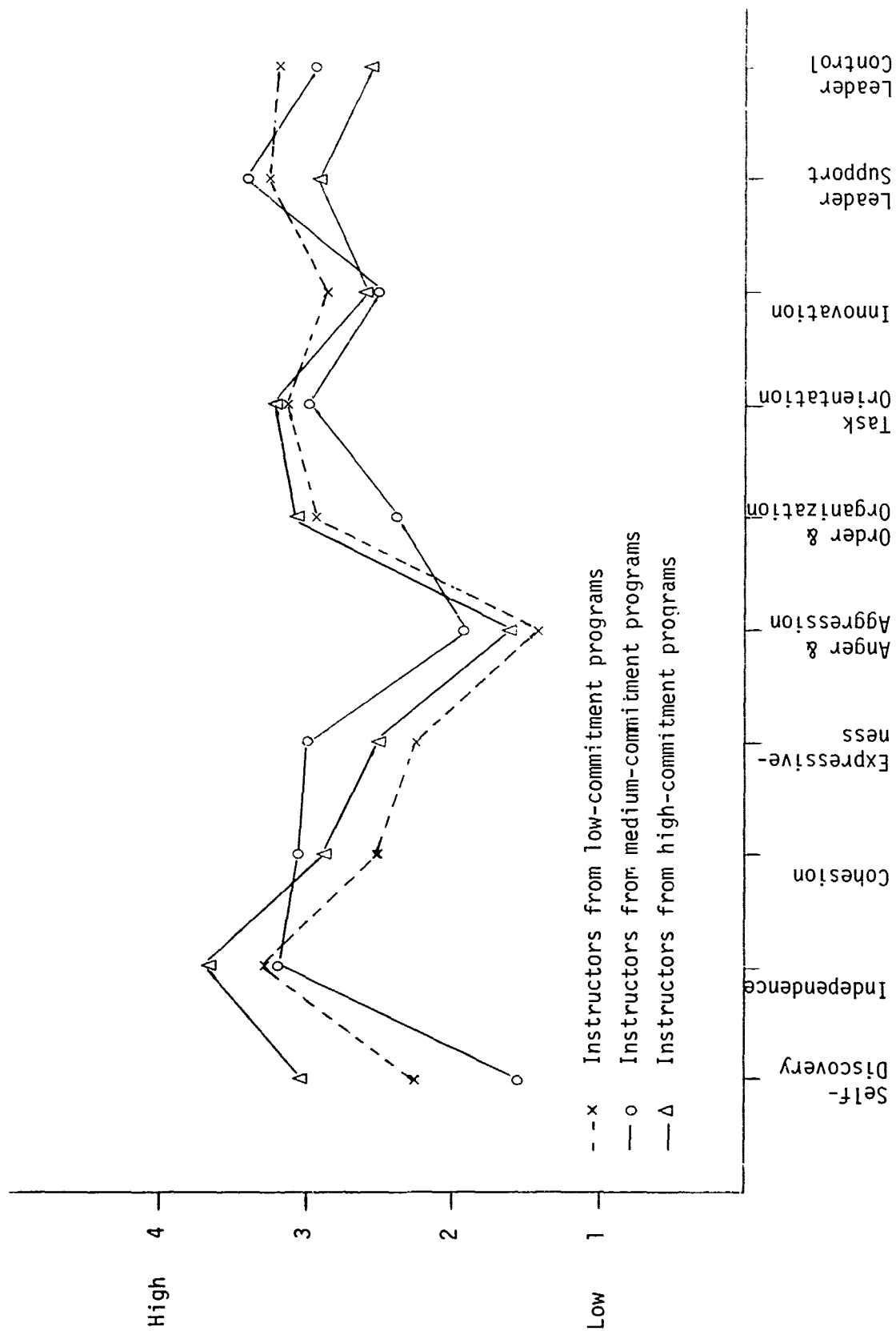


Figure 4
GROUP ENVIRONMENT PROFILE OF
LOW-, MEDIUM-, AND HIGH-COMMITMENT PROGRAMS

4. High-commitment programs were characterized to a greater extent than low-commitment programs by member-oriented emphases (Self-Discovery; Independence). Low-commitment programs were characterized to a greater extent than high-commitment programs by leader-oriented emphases (Leader Control; Leader Support).

The following conclusions may be drawn, bearing in mind that they are based on preliminary findings from a small "n" of 11 ROTC programs:

1. Behaviorally-oriented items such as those found in the Moos Group Environment Scale are better items to use for purposes of ROTC program evaluation than are subjective rating items.
2. ROTC programs oriented toward their members (instructors; cadets) are associated with higher cadet commitment than ROTC programs oriented toward their leader, or Professor of Military Science.

Responses to Open-Ended Questions

As stated previously, one of the goals of the present research effort was to serve as a pilot for future studies aimed at (a) documenting more completely the role of the ROTC program in the cadet career commitment process; and (b) evaluating the efficacy of ROTC as an officer-preparation program.

In light of this exploratory goal, many open-ended questions were included in the instructor questionnaire, among them:

1. What are the goals of your ROTC program?
2. What factors in your ROTC program help produce highly committed cadets and officers?
3. What factors in your ROTC program help produce cadets and officers with low commitment to an Army officer career?
4. What factors are keeping your ROTC program from better meeting its goals?
5. In your opinion, what are the most important characteristics of a good ROTC cadet?
6. What are the strong and weak points of (a) your ROTC teaching staff; (b) your cadets; and (c) your ROTC curriculum and materials?

Responses to each of these open-ended questions were content-analyzed in order to: (a) extract a universe of response/evaluation categories capable of being used in future studies on program influences on cadets' commitment; and (b) generate hypotheses capable of testing in future, larger studies with a greater number of participating programs.

The discussion now turns to findings gleaned from this content-analysis of responses to open-ended questions. First the response categories cited most frequently by the respondent sample as a whole will be described. Then differences in responses given by instructors from high-commitment programs and by instructors from low-commitment programs will be discussed. In light of the exploratory nature of the study, every effort will be made to lay out the universe of response categories provided by respondents. Thus, little or no collapsing of response categories will be done in the tables to be presented, even for the categories cited by a very small number of respondents. However, the text will only discuss responses provided by at least one-tenth of the respondent sample (4 of the 40 participating instructors).

Goals of the ROTC Program

Instructors were asked what they perceived the goals of their ROTC program to be. Table 9 gives the distribution of their responses to this question. In descending order of frequency of mention, the following categories of goals were cited: (a) officer preparation-related goals (46.2% of responses); (b) enrollment quantity-related goals (19.2%); (c) enrollment quality-related goals (17.9%); (d) ROTC image enhancement goals (10.3%); and (e) ROTC program improvement-related goals (6.4%).

There were few differences in the responses of instructors from high-commitment vs. low-commitment schools. The only one of significance was that instructors from low-commitment programs appeared to be more concerned with "image-enhancement" than instructors from high-commitment programs. This finding ties in well with the previously discussed finding that instructors from low-commitment programs have a strong tendency to present their programs in a "socially desirable" light.

Instructors were then asked to discuss what factors were keeping their ROTC program from better meeting its goals. Table 10 presents the distribution of responses to the question. Over one-third (22) of the 60 responses given centered around factors in the non-ROTC environment, especially the lack of school and community support for the ROTC program, and the poor Army image held by the general public. Another fourth (14) of responses centered around recruitment problems, especially the difficulty surrounding recruitment and retention of the "required minimum" enrollment figure. The two final factors cited by at least four respondents had to do with overwork of existing staff, specifically: (a) too much paperwork (cited by 4 respondents), and (b) too few staff for number of cadets (cited by 5 respondents).

As far as differences between responses given by instructors from low- and high-commitment programs were concerned:

1. Instructors from high-commitment programs gave many more responses than instructors from low-commitment programs (2.3 vs 1.2 responses per respondent, respectively).

TABLE 9
DISTRIBUTION OF RESPONSES TO THE ITEM
"WHAT ARE THE GOALS OF YOUR ROTC PROGRAM?"

RESPONDENT SAMPLE GOALS OF ROTC PROGRAM	INSTRUCTORS FROM 4 LOW- COMMITMENT PROGRAMS (n=12)		INSTRUCTORS FROM 3 MEDIUM- COMMITMENT PROGRAMS (n=10)		INSTRUCTORS FROM 4 HIGH- COMMITMENT PROGRAMS (n=18)		TOTAL (n=40)	
	n	%	n	%	n	%	n	%
I. Officer Preparation-Related Goals	<u>9</u>	36.0	<u>11</u>	57.9	<u>16</u>	47.1	<u>36</u>	46.2
A. To produce (motivated; qualified) second lieutenants for the U.S. Army	6		10		15		31	
B. To produce mature, informed, well- rounded citizens	3		1		1		5	
II. Enrollment Quantity-Related Goals	<u>4</u>	16.0	<u>4</u>	21.1	<u>7</u>	20.6	<u>15</u>	19.2
A. To attract a minimum number of students into Basic & Advanced ROTC; to commission a minimum number of officers a year	2		3		4		9	
B. To increase enrollment	2		1		3		6	
III. Enrollment Quality-Related Goals	<u>5</u>	20.0	<u>3</u>	15.8	<u>6</u>	17.6	<u>14</u>	17.9
A. To attract motivated, qualified students into ROTC	3		2		2		7	
B. To stimulate commitment/retention among enrolled cadets	1		0		4		5	
C. To eliminate marginal cadets from ROTC	1		1		0		2	
IV. Image Enhancement Goals	<u>5</u>	20.0	<u>1</u>	5.3	<u>2</u>	5.5	<u>6</u>	10.3
A. To improve/maintain ROTC image on campus	4		1		0		5	
B. To improve/maintain ROTC image in community	1		0		2		3	
V. Program Quality-Related Goals: to put together a "good," appropriate program	<u>2</u>	8.0	<u>0</u>	0.0	<u>3</u>	8.8	<u>5</u>	6.4
TOTAL NUMBER OF RESPONSES	25		19		34		78	
AVERAGE NUMBER OF RESPONSES PER RESPONDENT	2.1		1.9		1.9		2.0	

TABLE 10
DISTRIBUTION OF RESPONSES TO THE ITEM
"WHAT FACTORS ARE KEEPING YOUR ROTC PROGRAM FROM BETTER MEETING ITS GOALS?"

FACTORS KEEPING ROTC PROGRAM FROM BETTER MEETING GOALS	RESPONDENT SAMPLE		INSTRUCTORS FROM 4 LOW- COMMITMENT PROGRAMS (n=11)		INSTRUCTORS FROM 3 MEDIUM- COMMITMENT PROGRAMS (n=7)		INSTRUCTORS FROM 4 HIGH- COMMITMENT PROGRAMS (n=16)		TOTAL (n=34)	
	n	%	n	%	n	%	n	%	n	%
I. Factors in Non-ROTC Environment	3	23.1	4	36.4	15	41.7	22	36.7		
A. Lack of faculty/administration support for ROTC program	1		1		2		4			
B. Lack of community support for ROTC program	1		0		3		4			
C. Lack of peer (student) support for ROTC program	1		1		1		3			
D. Competition from civilian jobs	0		0		2		2			
E. Poor Army image										
1. General poor image of Army career	0		0		3		3			
2. Bitter feelings from Vietnam	0		1		1		2			
3. Misconceptions/misinformation about ROTC by general public	0		1		3		4			
II. Selection/Recruitment Procedures/Problems	2	15.4	3	27.3	9	25.0	14	23.3		
A. Small number of students in potential applicant pool, difficulty with recruiting/re-taining qualified students	1		2		5		8			
B. "Numbers" game which makes it difficult to drop marginal cadets	1		0		1		2			
C. Lack of special personalized recruitment among particularly qualified students	0		0		2		2			
D. Transfer of better students to better schools	0		0		1		1			
E. Cadre have to attend summer camp during prime recruiting time	0		1		0		1			
III. Administrative Problems. Too Much Paperwork for Cadre	2	15.4	1	9.1	1	2.8	4	6.7		
IV. Cadre	3	23.1	2	18.2	4	11.1	9	15.0		
A. Too few staff for number of cadets	2		2		1		5			
B. Problems with staff relationships	0		0		2		2			
C. Lack of influence of staff on cadets	1		0		0		1			
D. Poor selection of PMS	0		0		1		1			
V. Cadets	2	15.4	1	9.1	2	5.6	5	8.3		
A. Poor academic quality	1		0		2		3			
B. Disinterest in program/military	0		1		0		1			
C. Lack of direction	1		0		0		1			
VI. Funds Limitations	1	7.7	0	0.0	2	5.6	3	5.0		
A. Lack of funds for professional development and enrichment courses	0		0		1		1			
B. Lack of funds to allow cadets to travel	1		0		0		1			
C. Limited number of available scholarships	0		0		1		1			
VIII Other	0	0.0	0	0.0	3	8.3	3	5.0		
A. Absence of draft	0		0		1		1			
B. Slow promotion after entering active duty	0		0		1		1			
C. Newness of program	0		0		1		1			
TOTAL NUMBER OF RESPONSES	13		11		36		60			
AVERAGE NUMBER OF RESPONSES PER RESPONDENT	1.2		1.6		2.3		1.8			

2. The main drawback-factors cited by instructors from high-commitment programs centered around problems external to ROTC, i.e., the difficulty of recruiting qualified students from such a small potentially-interested base (5 mentions), lack of community support for the ROTC program, the poor image of an Army career, and misinformation about ROTC/Army held by the general public (3 mentions each).
3. The only drawback-factors cited by more than one instructor from low-commitment programs centered around their personal work overload, specifically "too much paperwork" and "too few staff" (2 mentions each).

ROTC Program Factors Associated with High and Low Cadet Commitment

Instructors were asked to describe the factors in their ROTC program that help produce high and/or low commitment in their cadets. Factors associated with high commitment are given in Table 11, factors associated with low commitment in Table 12.

For both sets of questions, over 85% of responses given centered around three categories: (a) the ROTC cadre or instructor staff; (b) the ROTC curriculum; and (c) the ROTC cadets. Interestingly, but perhaps not unexpectedly, instructors cited themselves most frequently (46.7% of responses) as contributing to high commitment among cadets; for factors contributing to low commitment, factors related to the ROTC curriculum and to cadets themselves were cited more frequently than instructor-related factors (33.3% and 31.4% vs. 23.5%). Again, it would be interesting to compare these perceptions with those held by cadets in the program.

The specific factors perceived as contributing most to high commitment in cadets were: cadre relationship with/concern about cadets (Category I-A, Table 11, 16 mentions), cadre personal example (I-B, 13 mentions), and physical and extra-curricular enrichment activities (II-A, 13 mentions). Many instructors extolled the utility of these enrichment courses in attracting and retaining highly qualified cadets.

The specific factors perceived as contributing most to low commitment in cadets were: lack of intrinsic motivation on the part of cadets (Category III-A, Table 12, 9 mentions; most of these remarked that many cadets were in ROTC "just for the money"), and unacceptably low standards of admission because of imposed "minimum" enrollment numbers (Category II-A, 8 mentions).

As far as differences in the response patterns of instructors from high- vs. low-commitment programs were concerned, the following findings emerged:

1. Proportionately more instructors from high-commitment programs cited their relationship with/concern about cadets (Category I-A, Table 11) as producing high commitment. Proportionately more instructors from low-commitment programs cited cadets' intrinsic motivation (Category III-A) as producing high commitment.

TABLE 11
DISTRIBUTION OF RESPONSES TO THE ITEM
"WHAT FACTORS IN YOUR ROTC PROGRAM HELP PRODUCE HIGHLY COMMITTED CADETS AND
ARMY OFFICERS?"

FACTORS PRODUCING HIGH COMMITMENT IN CADETS	RESPONDENT SAMPLE	INSTRUCTORS FROM 4 LOW- COMMITMENT PROGRAMS (n=11)		INSTRUCTORS FROM 3 MEDIUM- COMMITMENT PROGRAMS (n=9)		INSTRUCTORS FROM 4 HIGH- COMMITMENT PROGRAMS (n=16)		TOTAL (n=36)	
		n	%	n	%	n	%	n	%
I. Cadre		<u>7</u>	35.0	<u>9</u>	39.1	<u>19</u>	59.4	<u>35</u>	46.7
A. Relationship with/ concern about cadets		3		3		10		16	
B. Personal example (professionalism, sincerity, etc.)		4		5		4		13	
C. Quality of instruction		0		1		3		4	
D. Efficiency		0		0		1		1	
E. Involvement in many activitie		0		0		1		1	
II. Curriculum		<u>8</u>	40.0	<u>12</u>	52.2	<u>8</u>	25.0	<u>28</u>	37.3
A. Physical and extra-curricular "enrichment" activities		4		4		5		13	
B. Leadership/character develop- ment orientation of program		1		2		1		4	
C. "Good," "traditional" program		2		2		1		5	
D. Practical, career-oriented nature of program		1		2		1		4	
E. Use of older cadets in train- ing of younger cadets		0		2		0		2	
III. Cadets		<u>4</u>	20.0	<u>2</u>	8.7	<u>3</u>	9.4	<u>9</u>	12.0
A. Motivation; participation in all phases of program		4		0		0		4	
B. Military background (home life)		0		1		2		3	
C. Patriotism		0		1		0		1	
D. Friendship with cadets who have similar values		0		0		1		1	
IV. Incentives for Future Career (job security; status; salary)		<u>0</u>	0.0	<u>0</u>	0.0	<u>1</u>	3.1	<u>1</u>	1.3
V. Environmental Factors Outside ROTC		<u>1</u>	5.0	<u>0</u>	0.0	<u>1</u>	3.1	<u>2</u>	2.7
A. Institutional (school) support		1		0		0		1	
B. Present economic instability in country		0		0		1		1	
TOTAL NUMBER OF RESPONSES		20		23		32		75	
AVERAGE NUMBER OF RESPONSES PER RESPONDENT			1.8		2.6		2.0		2.1

TABLE 12

DISTRIBUTION OF RESPONSES TO THE ITEM
 "WHAT FACTORS IN YOUR ROTC PROGRAM HELP PRODUCE CADETS AND OFFICERS WITH LOW
 COMMITMENT TO AN ARMY OFFICER CAREER?"

FACTORS PRODUCING LOW COMMITMENT IN CADETS	RESPONDENT SAMPLE	INSTRUCTORS FROM 4 LOW- COMMITMENT PROGRAMS (n=9)		INSTRUCTORS FROM 3 MEDIUM COMMITMENT PROGRAMS (n=10)		INSTRUCTORS FROM 4 HIGH- COMMITMENT PROGRAMS (n=15)		TOTAL (n=34)	
		n	%	n	%	n	%	n	%
I. Cadre		<u>4</u>	33.3	<u>3</u>	16.7	<u>5</u>	23.8	<u>12</u>	23.5
A. Poor relationship with cadets		2		2		2		6	
B. Poor personal example (lack of integrity, dedication)		1		0		1		2	
C. Poor quality of instruction		1		0		0		1	
D. Inefficiency		0		1		0		1	
E. Low commitment to military		0		0		1		1	
F. Presence of NCO's on staff		0		0		1		1	
II. Curriculum		<u>4</u>	33.3	<u>5</u>	27.8	<u>8</u>	38.1	<u>17</u>	33.3
A. Standards too low: emphasis on quantity instead of quality		0		4		4		8	
B. Standards too high: some cadets cannot meet them		3		0		0		3	
C. Too many demands on cadets' and cadre's time		1		0		2		3	
D. Too much paperwork for staff		0		1		1		2	
E. Too "physical" and "military"		0		0		1		1	
III. Cadets		<u>3</u>	25.0	<u>8</u>	44.4	<u>5</u>	23.8	<u>16</u>	31.4
A. Lack of intrinsic interest or motivation; motivated by extrinsic reasons for joining ROTC (e.g. financial incentives)		2		4		3		9	
B. Lack of control over future role in the Army		0		3		0		3	
C. Misinformation about ROTC program or about Army career opportunities		1		0		1		2	
D. Poor performance in Advanced Camp		0		0		1		1	
E. Low opinion of government		0		1		0		1	
IV. Environmental Factors Outside ROTC		<u>1</u>	8.3	<u>2</u>	11.1	<u>3</u>	14.3	<u>6</u>	11.8
A. Isolation of school from a military base		0		2		0		2	
B. Negative peer pressure		0		0		1		1	
C. School environment is not good preparation for Army environment		0		0		1		1	
D. Erosion of publicized benefits of ROTC		0		0		1		1	
E. Economic competition from good civilian jobs		1		0		0		1	
TOTAL NUMBER OF RESPONSES		12		18		21		51	
AVERAGE NUMBER OF RESPONSES PER RESPONDENT		1.3		1.8		1.4		1.5	

2. Instructors from medium-and high-commitment programs perceived ROTC admission/retention standards as being too low (Category II-A, Table 12); instructors from low-commitment programs perceived these standards as being too high (Category II-B).

Finally, instructors were asked to evaluate the strong and weak points of three components of their ROTC program: its (a) cadre; (b) cadets; and (c) curriculum/materials. Their evaluation of each of these components will now be discussed in turn.

Evaluation of Cadre

Table 13 presents the strong and weak points of the ROTC cadre in the eleven participating institutions, as perceived by the cadre themselves. Both the strong and weak points were coded into the following evaluation categories: I, Cadre qualifications; II, Cadre composition/organization; III, Cadre interpersonal relationships; IV, Opportunities for cadre development; and V, Administrative vs. teaching demands on cadre time. (The interested reader is urged to peruse Column 1 of Table 13 at this point for information on the specific responses that were organized under these general codes.) The first three general codes were the major ones, with 100% of the strong point responses and over 85% of the weak point responses falling under one of those three categories.

Columns 5 and 9 give the number and proportion of responses falling under each category. Cadre qualifications--especially their experience, abilities, and motivation--were seen primarily as a strong point, the other four categories (II to V) as weak points. The most frequently mentioned cadre weak points were: (a) interpersonal relationships within the cadre group (7 mentions); (b) cadre educational qualifications (5 mentions); and (c) the lack of variety of Army branches represented by the cadre (4 mentions).

As far as differences between high- and low-commitment programs were concerned, the following findings emerged:

1. Twenty of the 21 (95.2%) strong point responses given by instructors from low-commitment programs centered around their personal qualifications. Responses given by instructors from high-commitment programs were more varied, with less than 80% of responses centering around cadre qualifications and 20% centering around cadre interpersonal relationships, especially their relationship with cadets. This finding is in line with the previously discussed finding that cadre-cadet relations appear to be a potent influence on cadets' career commitment.
2. With respect to weak point responses, instructors from high-commitment programs gave 21 responses, an average of 1.2 responses per instructor. Instructors from low-commitment program gave only 6 responses, an average of 0.5 responses per respondent. Notice how, once again, instructors from low-commitment programs appear to repress, or be very reluctant to express, negative evaluations of themselves.

TABLE 13

STRONG AND WEAK POINTS OF ROTC CADRE

RESPONDENT SAMPLE CATEGORIES	STRONG POINTS						WEAK POINTS									
	INSTRUCTORS FROM 4 LOW- COMMITMENT PROGRAMS (n=12)		INSTRUCTORS FROM 3 MEDIUM- COMMITMENT PROGRAMS (n=9)		INSTRUCTORS FROM 4 HIGH- COMMITMENT PROGRAMS (n=18)		TOTAL (n=39)		INSTRUCTORS FROM 4 LOW- COMMITMENT PROGRAMS (n=12)		INSTRUCTORS FROM 3 MEDIUM- COMMITMENT PROGRAMS (n=9)		INSTRUCTORS FROM 4 HIGH- COMMITMENT PROGRAMS (n=18)		TOTAL (n=39)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
I. Cadre Qualifications A. Education B. Experience C. Abilities (Teaching Abilities, Knowledge of Subject Matter, Intelligence) D. Personal Characteristics 1. Motivation; Dedication; Participation in Voluntary Extra-Curricular Activities Example 2. Professionalism; Good Personal Example 3. Innovativeness 4. Flexibility 5. Self-confidence	20	95.2	18	72.0	35	77.8	73	80.2	2	33.3	2	25.0	9	42.9	13	37.1
	2		3		6		11		0		0		4		5	
	6		4		6		16		0		0		1		1	
	4		1		8		13		0		1		1		2	
	3		5		10		18		1		0		2		3	
	3		3		3		9		0		0		1		1	
	0		2		0		2		0		0		0		0	
	1		0		1		2		0		1		0		1	
	1		0		1		2		0		0		0		0	
	0	0.0	6	24.0	1	2.2	7	7.7	1	16.7	4	50.0	3	14.3	8	22.9
II. Cadre Composition/Organization A. Variety of Ranks & Army Branches Represented B. Able Leadership C. Able Support Staff D. Maximal Utilization of Staff Talents E. Adequate Number of Staff	0		2		0		2		0		3		1		4	
	0		2		0		2		0		1		0		1	
	0		1		1		2		0		0		0		0	
	0		1		0		1		0		0		1		1	
	0		0		0		0		1		0		1		2	
	1	4.8	1	4.0	9	20.0	11	12.1	1	16.7	1	12.5	7	33.3	9	25.7
III. Cadre Interpersonal Relationships A. Within Cadre group (cooperation; good communication; morale) B. With Cadets	1		0		2		3		1		1		5		7	
	0		1		7		8		0		0		2		2	
	0	0.0	0	0.0	0	0.0	0	0.0	1	12.5	0	0.0	0	0.0	1	2.9
IV. Opportunities for Cadre Development V. Administrative vs. Teaching Demands on Cadre Time	0	0.0	0	0.0	0	0.0	0	0.0	2	33.3	0	0.0	2	9.5	4	11.4
	21		25		45		91		6		8		21		35	
TOTAL NUMBER OF RESPONSES																
AVERAGE NUMBER OF RESPONSES PER RESPONDENT	1.8		2.8		2.5		2.3		0.5		0.9		1.2		0.9	

3. Instructors from high-commitment programs cited two main cadre weak points: (a) cadre interpersonal relationships (5 mentions), and (b) their educational qualifications (4 mentions). The only weak point cited by more than one instructor from a low-commitment program was the overload posed by administrative responsibilities which interfered with their teaching responsibilities (2 mentions).

Evaluation of Cadets

Instructors were asked to describe what they perceived to be the most important characteristics of a good cadet ("...Assume that your Department of Military Science could attract students at will from your school's general student body. What kinds of students would you like to attract into the Army ROTC program? Why?). Then they were asked to evaluate the strong and weak points of their current group of cadets.

Profile of the Ideal Cadet

Instructors' profile of the ideal cadet is given in Table 14. Instructors placed about equal weight on academic abilities (Category I, Table 14), motivation (III), and other personal characteristics (VII) such as maturity and honesty. Instructors from high-commitment programs tended to emphasize academic achievement more than instructors from low-commitment programs; instructors from low-commitment programs tended to emphasize cadet motivation more. Other characteristics of a good cadet as perceived by ROTC instructors were, in order of decreasing frequency of mention: physical abilities (Category II), leadership orientation (Category V), practical goal orientation (VI), and participation in extra-curricular activities (IV).

Should these findings be verified by a larger study, then ROTC selection and scholarship award procedures could be modified to suit this profile. Present ROTC scholarship award procedures, for example, choose awardees on the basis of the "Whole Man Score," a linear combination of the following variables: (a) SAT (or ACT) score; (b) high school class standing score; (c) extra-curricular, athletic, and leadership activities background score, and (d) personal interview score (weighted, respectively, as follows: 3, 3, 3, 1). Findings from the present study, together with findings from a previous study (Card, *et al.*, 1975, in which ROTC scholarships were found to be unrelated to commitment, especially at the Army officer career stage), suggest that it may be advisable to expand the Whole Man Score to include a reliable, valid measure of motivation and career commitment. Commitment indices documented in the 1975 Card report could be used as the basis for creation of this new measure.

Strong and Weak Points of Cadets

Table 15 presents the strong and weak points of cadets in the 11 participating programs, as perceived by their instructors. Over 3/4

TABLE 14
MOST IMPORTANT CHARACTERISTICS
OF A GOOD ROTC CADET

MOST IMPORTANT CHARACTERISTICS OF A GOOD CADET	RESPONDENT SAMPLE		INSTRUCTORS FROM 4 LOW- COMMITMENT PROGRAMS (n=12)		INSTRUCTORS FROM 3 MEDIUM- COMMITMENT PROGRAMS (n=10)		INSTRUCTORS FROM 4 HIGH- COMMITMENT PROGRAMS (n=16)		TOTAL (n=38)	
	n	%	n	%	n	%	n	%	n	%
I. Academic Abilities (intelligence; good grades; high SAT scores)	5	15.2	8	20.5	14	24.6	27	20.9		
II. Physical Abilities (physical fitness; athletic abilities)	2	6.1	5	12.8	8	14.0	15	11.6		
III. Motivation	12	36.4	7	17.9	12	21.1	31	24.0		
A. Dedication; enthusiasm	6		2		3		11			
B. Genuine interest in ROTC/Army (not in ROTC "just for the money")	5		2		4		11			
C. Desire to serve country	0		3		3		6			
D. Desire to learn and improve self	1		0		2		3			
IV. Participant Orientation (active in campus extra-curricular affairs)	0	0.0	2	5.1	2	3.5	4	3.1		
V. Leadership Orientation (student leader; possession of leadership qualities)	3	9.1	4	10.3	3	5.3	10	7.9		
VI. Practical Goal-Orientation (pragmatic; success-oriented; competitive)	3	9.1	4	10.3	1	1.8	8	6.2		
VII. Other Personal Characteristics	8	24.2	9	23.1	17	29.8	34	26.4		
A. Mature; dependable	2		1		4		7			
B. Honest	2		1		1		4			
C. Cooperative	0		2		1		3			
D. Other (articulate, selfless, flexible, self-disciplined, independent, etc.)	4		5		11		20			
TOTAL NUMBER OF RESPONSES	33		39		57		129			
AVERAGE NUMBER OF RESPONSES PER RESPONDENT	2.8		3.9		3.6		3.4			

TABLE 15

RESPONDENT SAMPLE	STRONG POINTS						WEAK POINTS									
	INSTRUCTORS FROM 4 LOW- COMMITMENT PROGRAMS (n=12)		INSTRUCTORS FROM 3 MEDIUM- COMMITMENT PROGRAMS (n=10)		INSTRUCTORS FROM 4 HIGH- COMMITMENT PROGRAMS (n=17)		TOTAL (n=39)		INSTRUCTORS FROM 4 LOW- COMMITMENT PROGRAMS (n=12)		INSTRUCTORS FROM 3 MEDIUM- COMMITMENT PROGRAMS (n=10)		INSTRUCTORS FROM 4 HIGH- COMMITMENT PROGRAMS (n=17)		TOTAL (n=39)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
CADET EVALUATION CATEGORIES																
I. Academic Background and Abilities																
A. Quality of High School preparation	4	21.1	1	6.2	0	0.0	5	7.8	5	33.3	3	23.1	7	36.8	15	31.9
B. Academic abilities (grades; SAT scores; IQ)	3		1		0		4		2		2		6		5	
III. Physical Fitness and Abilities	3	15.8	0	0.0	0	0.0	3	4.7	2	13.3	0	0.0	1	5.3	3	6.4
III. Personal Characteristics	11	57.9	11	68.8	27	93.1	49	76.6	6	40.0	6	46.2	8	42.1	20	42.6
A. Motivation; dedication	7		5		11		23		0		0		7		7	
B. Genuine interest in ROTC/Army	2		3		6		11		2		1		1		4	
C. Maturity; dependability	1		1		3		5		0		1		3		4	
D. Leadership ability; independence	1		0		1		2		0		2		2		4	
E. Social skills	0		0		0		0		3		1		0		4	
F. Integrity	0		1		2		3		0		0		0		0	
G. Other	0		1		4		5		1		1		1		3	
IV. Participation in ROTC-related Activities	1	5.3	3	18.8	1	3.4	5	7.8	1	6.7	2	15.4	0	0.0	3	6.4
V. Composition/Cohesiveness of Cadet Group	0	0.0	1	6.2	1	3.4	2	3.1	0	0.0	2	15.4	2	10.5	4	8.5
A. Number of cadets in program	0		0		0		0		0		0		1		1	
B. Variety and types of background represented	0		0		1		1		0		1		0		1	
C. Support from cadets' families	0		1		0		1		0		0		0		0	
D. Interpersonal relationships among cadets	0		0		0		0		0		1		1		2	
VI. ROTC vs. Other Demands on Cadets' Time	0	0.0	0	0.0	0	0.0	0	0.0	1	6.7	0	0.0	1	5.3	2	4.3
TOTAL NUMBER OF RESPONSES	19		16		29		64		15		13		19		47	
AVERAGE NUMBER OF RESPONSES PER RESPONDENT	1.6		1.6		1.7		1.6		1.3		1.3		1.0		1.2	

(76.6%) of the "strong point" responses centered around personal characteristics of cadets (Category III, Table 15), especially their motivation and dedication. About 42.6% of "weak-point" responses likewise centered around cadets' personal characteristics. However, their motivation and dedication were faulted by only one instructor. Four instructors found cadets to be lacking in each of the following desired personal characteristics: genuine interest in ROTC/Army, maturity/dependability, independence, and social skills.

Another defect in cadets cited by over 30% of instructors surveyed was their poor academic background/abilities. This finding ties in with the finding reported in Card, et al., 1975, that cadets have lower academic grades than their non-ROTC classmates.

Other cadet evaluation categories cited about equally (and infrequently) in the "strong" and "weak" directions were: physical fitness and abilities (Category II), participation in ROTC-related activities (IV), and composition/cohesiveness of cadet group (V). Finally, two instructors thought ROTC took too much of cadets' school time (VI).

Evaluation of ROTC Curriculum and Materials

The strong and weak points of the ROTC curriculum and materials, as perceived by participating ROTC instructors, are presented in Table 16. The primary strong points mentioned were the "innovativeness" of the curriculum (Category I-C, 9 mentions) and the curriculum's practical, career-orientation (I-E-2, 8 mentions). In describing the curriculum's innovativeness, many instructors again mentioned the previously discussed extracurricular enrichment courses.

The only specific weak points mentioned by a significant number of instructors were the un-challenging, uninteresting nature of many ROTC courses (II-C, 5 mentions), and the overload of administrative demands on cadre's time (V, 5 mentions).

Instructors from high-commitment programs once again came up with more weak-point responses than did instructors from low-commitment programs. In general, instructors from low-commitment programs evaluated the present curriculum (Category I) more favorably than instructors from high-commitment programs (12 strong and 1 weak mentions vs. 9 strong and 7 weak mentions, respectively). Both sets of instructors found most fault with existing ROTC textbooks (Category III, 13 mentions), especially their appropriateness for ROTC and their completeness (III-B and III-C, each of which had more weak than strong mentions).

SUMMARY AND IMPLICATIONS

Data from a recently completed study (Card, et al., 1975) were subjected to additional analyses to determine whether any evidence of ROTC-program influences on cadets' career commitment could be found.

TABLE 16

STRONG AND WEAK POINTS OF ROTC CURRICULUM

RESPONDENT SAMPLE	STRONG POINTS						WEAK POINTS					
	INSTRUCTORS FROM 4 LOW- COMMITMENT PROGRAMS (n=12)		INSTRUCTORS FROM 3 MEDIUM- COMMITMENT PROGRAMS (n=9)		INSTRUCTORS FROM 4 HIGH- COMMITMENT PROGRAMS (n=18)		INSTRUCTORS FROM 4 LOW- COMMITMENT PROGRAMS (n=12)		INSTRUCTORS FROM 3 MEDIUM- COMMITMENT PROGRAMS (n=9)		INSTRUCTORS FROM 4 HIGH- COMMITMENT PROGRAMS (n=18)	
	n	\bar{x}	n	\bar{x}	n	\bar{x}	n	\bar{x}	n	\bar{x}	n	\bar{x}
CURRICULUM EVALUATION CATEGORIES												
I. Curriculum	12	63.2	12	92.3	9	34.6	33	56.9	2	29.0	7	30.4
A. Organization	0		2		1		3		0		2	
B. Completeness	0		0		1		1		0		1	
C. Innovativeness	2		4		3		9		0		1	
D. Flexibility	2		1		2		5		0		0	
E. Proper emphasis												
1. Balance between classroom (theory) and field activities (practice), career-related orientation	2		0		0		2		1		1	
2. Practical, career-related orientation	5		2		1		8		0		2	
3. Stress on development of character and leadership qualities	1		3		1		5		1		0	
ii. Courses	5	26.3	0	0.0	2	7.7	7	12.1	4	40.0	1	4.3
A. General quality	1		0		1		2		0		0	
B. Quality of field activities	1		0		1		2		1		0	
C. Challenging, interesting nature	3		0		0		3		3		1	
III. Textbooks and Other Material	2	10.5	1	7.7	0	38.5	13	22.4	0	0.0	10	43.5
A. General quality	1		0		3		4		0		2	
B. Appropriateness for ROTC	0		0		0		0		0		2	
C. Completeness	1		0		1		2		0		3	
D. Up-to-datedness	0		0		3		3		0		1	
E. Availability of audio-visual and other training aids	0		1		3		4		0		2	
IV. Facilities	0	0.0	0	0.0	1	3.8	1	1.7	2	20.0	1	4.3
A. Campus facilities	0		0		1		1		1		0	
B. Accessibility of training facilities off campus	0		0		0		0		1		1	
V. Administrative vs. Teaching Demands on Staff Time	0	0.0	0	0.0	0	0.0	0	0.0	1	10.0	4	17.4
VI. University Support	0	0.0	0	0.0	4	15.4	4	6.9	1	10.0	0	0.0
A. Academic credit for ROTC	0		0		1		1		1		0	
B. General university backing/ support	0		0		3		3		0		0	
TOTAL NUMBER OF RESPONSES	19		13		26		58		10		23	
AVERAGE NUMBER OF RESPONSES PER RESPONDENT	1.6		1.4		1.4		1.5		1.1		1.3	
												1.1

The re-analysis showed that significant differences in commitment, beliefs about ROTC, and beliefs about the Army did in fact exist among cadets enrolled in the 11 participating ROTC programs.

A new survey was conducted with the aim of uncovering the nature and extent of these program-related influences on commitment. Forty ROTC instructors from the 11 colleges that had participated in the cadet survey took part in the new survey.

The questionnaire asked for instructors' opinions on and evaluation of the following components of their ROTC programs: size, age, cadre, cadets, curriculum and materials, social and intellectual atmosphere, selection and recruitment procedures. Information on school and community support of the ROTC program was also collected.

Because of the small number of participating programs, the study was conceived primarily as a pilot project whose methodology and findings could be used as the basis for future, larger investigations of ROTC-program determinants of cadets' career commitment.

Findings

The following major findings emerged from analysis of survey data:

Demographic Characteristics of the ROTC Program

1. Newer programs had more highly committed cadets than older programs.
2. Smaller programs (in terms of number of instructors, and number of cadets in Basic and Advanced ROTC) had more highly committed cadets than larger programs.
3. There was no relationship between number of years experience of the ROTC instructor staff and cadets' commitment.

Ratings of ROTC Program Components

4. Contrary to expectations, instructors from ROTC programs producing cadets with low commitment rated the competence of their teaching staff, quality of their curriculum and materials, relevance of their curriculum to an Army officer career, competence of their cadets, participation by their cadets in non-mandatory ROTC activities, commitment of their cadets to an Army officer career, intellectual climate, and over-all quality of their ROTC program more favorably than did instructors from ROTC programs producing highly committed cadets. These ratings given by instructors from low-commitment programs were shown to be biased in the socially desirable direction.

5. The social climate of an ROTC program is a very potent determinant of cadets' career commitment. Specifically, the following components of social climate help produce highly committed cadets: (a) staff morale; (b) amount of time spent by staff with cadets; and (c) orientation of the program towards group members (staff; cadets) as opposed to the group leader (PMS).

Goals of the ROTC Program

6. Instructors perceived the following to be the goals of their ROTC programs (in order of decreasing frequency of mention): (a) to produce second lieutenants for the U.S. Army; (b) to increase ROTC enrollment; (c) to improve the quality of the ROTC cadet corps; (d) to enhance ROTC's image on campus and in the community; and (e) to improve the existing ROTC program.
7. The only difference in the goals held by instructors from low- vs. high-commitment programs lay in the fact that instructors from low-commitment programs were more concerned with "image-enhancement." This finding ties in well with the previously discussed finding (see Finding 4) that instructors from low-commitment programs have a strong tendency to present their programs in a socially desirable light.

Factors Keeping ROTC Program from Better Meeting Its Goals

8. Instructors from high-commitment programs perceived problems external to ROTC--e.g., the difficulty of recruiting students from a generally disinterested student body, the lack of community support for the ROTC program, the poor image of an Army officer career, and misinformation about ROTC/Army held by the general public--as keeping their program from better meeting its goals.
9. Instructors from low-commitment programs perceived their personal work overload, specifically "too much paperwork" and "too few staff" as keeping their program from better meeting its goals.

Program Factors Associated with High and Low Cadet Commitment

10. Instructors cited themselves most frequently (46.7% of responses) as contributing to high commitment among cadets; for factors contributing to low commitment, factors related to the ROTC curriculum and to cadets themselves were cited more frequently than instructor-related factors (33.3% and 31.4% vs. 23.5%).

11. The specific factors perceived as contributing most to high commitment in cadets were: cadre relationship with/concern about cadets, cadre personal example, and physical and extra-curricular enrichment activities. Many instructors extolled the utility of these enrichment courses in attracting and retaining highly qualified cadets.
12. The specific factors perceived as contributing most to low commitment in cadets were: lack of intrinsic motivation on the part of cadets (many cadets in ROTC "just for the money"), and unacceptably low standards of admission because of imposed "minimum" enrollment numbers.

As far as differences in the response patterns of instructors from high- vs. low-commitment programs were concerned, the following findings emerged:

13. Proportionately more instructors from high-commitment programs cited their relationship with/concern about cadets as producing high commitment. Proportionately more instructors from low-commitment programs cited cadets' intrinsic motivation as producing high commitment.
14. Instructors from medium- and high-commitment programs perceived ROTC admission/retention standards as being too low; instructors from low-commitment programs perceived these standards as being too high. The "numbers game" imposed on ROTC programs--the rules of which call for closing down of programs not meeting minimum enrollment figures--was criticized severely by many instructors, especially by instructors from high-commitment programs, as contributing to the "poor quality" of enrolled cadets.

Evaluation of Cadre

15. Cadre qualifications--especially their experience, abilities, and motivation--were seen as their strongest point. The most frequently mentioned cadre weak points were: (a) inter-personal relationships within the cadre group; (b) cadre educational qualifications; and (c) the lack of variety of Army branches represented by the cadre.

Evaluation of Cadets

16. In describing the characteristics of a good cadet, instructors placed about equal weight on academic abilities, motivation, and other personal characteristics such as maturity and honesty. Instructors from high-commitment programs tended to emphasize academic achievement more than instructors from low-commitment programs; instructors from low-commitment programs tended to emphasize cadet motivation more. Other characteristics of a good cadet as perceived by ROTC instructors were, in order of decreasing frequency of mention: physical abilities, leadership orientation, practical goal orientation, and participation in extra-curricular activities.

17. In evaluating the strong and weak points of their cadets, over 3/4 (76.6%) of instructors' "strong point" responses centered around personal characteristics of cadets, especially their motivation and dedication. About 42.6% of "weak-point" responses likewise centered around cadets' personal characteristics. However, their motivation and dedication were faulted by only one instructor. Four instructors found cadets to be lacking in each of the following desired personal characteristics: genuine interest in ROTC/Army, maturity/dependability, independence, and social skills.
18. Another defect in cadets cited by over 30% of instructors surveyed was their poor academic background/abilities. This finding ties in with the finding reported in Card, et al., 1975 that cadets have lower academic grades than their non-ROTC classmates.

Evaluation of ROTC Curriculum and Materials

19. The primary strong points of the ROTC curriculum, as perceived by ROTC instructors, were the "innovativeness" of the curriculum and the curriculum's practical career-orientation. In describing the curriculum's innovativeness, many instructors again mentioned ROTC's extracurricular enrichment courses.
20. The only specific weak points mentioned by a significant number of instructors were the un-challenging, uninteresting nature of many ROTC courses, and the overload of administrative demands on cadre's time.
21. Instructors from low-commitment programs evaluated the present curriculum more favorably than instructors from high-commitment programs. Both sets of instructors found some fault with existing ROTC textbooks, especially their appropriateness for ROTC and their completeness.

Integration and Implications

The Quantity-Quality Tension

Many of these results converge on the tension between quantity and quality that besets ROTC programs. Consider the following major findings of the study:

- F1. Instructors from high-commitment programs spoke more frequently about spending outside-class time with their cadets than did instructors from low-commitment programs.
- F2. Excessive paperwork and other administrative demands on ROTC instructors' time were an often-mentioned problem, especially for instructors from low-commitment programs.

- F3. Smaller programs (in terms of number of instructors and number of cadets in Basic and Advanced ROTC) had more highly committed cadets than larger programs.
- F4. Minimum enrollment requirements were criticized by many instructors, especially those in high-commitment programs.
- F5. Instructors from low-commitment programs perceived their ROTC programs, as well as school and community support for their programs, in a much more favorable light than did instructors from high-commitment programs. They assigned more favorable subjective ratings to these factors, and they came up with fewer "weak points" in their open-ended assessments.

At first glance these five findings appear to be separate and independent. However, they can be integrated as converging findings centering on a single theme.

Consider F1 and F2. Perhaps instructors from low-commitment programs do not spend much time with their cadets because excessive paperwork and other administrative demands take up too much of their time. Instructors from high-commitment programs may not be similarly burdened.

Why? F3 suggests an answer. Instructors from high-commitment programs have significantly fewer cadets under their wing. The figures presented in Figure 5, for example, can be manipulated to show that the average instructor-to-student ratio is 1:25 for high-commitment programs, but only 1:50 for low-commitment programs!

F4 shows that high-commitment programs feel more pressure to comply with the requirements of the "numbers game." This is not surprising because they have fewer enrolled cadets.

In light of F1 to F4, F5 takes on new meaning. The text of this report presented two possible explanations for the unrealistically favorable perceptions held by instructors from low-commitment programs: (a) they have a strong, defensive tendency to present their programs in a socially desirable light; and (b) they are less capable than instructors from high-commitment programs of making a critical and objective assessment of the situation. One or both of these explanations may in fact be true, but a likely source for the mistaken perceptions now becomes apparent. The low-commitment programs are in fact doing "better" than high-commitment programs according to the rules of the "numbers game": they have many more enrolled cadets.

A well-known theory in social psychology is the "self-perception" of Daryl J. Bem. According to this theory, people often infer their attitudes from an observation of their own behavior. Applying the tenets of this theory to the situation at hand, it is not surprising that instructors from low-commitment programs look at their good recruitment performance, and conclude that they have a good program going.

This is the quality-quantity tension. Programs that are successful recruitment-wise develop an administrative overload for their staff that keeps staff from spending time with cadets. The cadre-cadet relationship is a very important determinant of cadets' commitment. And so cadets from large ROTC programs are not as committed to ROTC/Army as are cadets from small programs.

These insights were derived from a small "n" of 11 programs, and are therefore not definitive. But they do provide a strong basis for further examination of the quality-quantity tension. Present ROTC recruitment policies call for enrolling as many cadets as possible in Basic ROTC, in the hope that a sufficient number of these will be motivated enough to join the Advanced program. *Data from the present study indicate that an alternative policy worth investigating is to shift the emphasis in recruitment and selection from "number who enroll" to "number who will stay": to recruit fewer cadets into ROTC, but to spend more time with enrolled cadets. The time investment should pay off in the form of higher retention rates.*⁹

Improving Selection Criteria

What characteristics does a "good" cadet possess? What kinds of students should recruiters try to attract into Army ROTC?

There are two complementary ways of formulating an answer to this question. One is empirically: define a set of desired outcome measures such as retention and performance. Then select cadets on the basis of the extent to which they possess empirical predictors of these outcome variables. The other is judgmentally: ask a group of experienced ROTC instructors what they consider to be important characteristics of a good cadet, and use the resultant profile as the basis for recruitment and selection.¹⁰ The two approaches can be used, jointly, for maximum insight.

Instructors in the present study were asked what they considered to be the most important characteristics of a good cadet. Their answers to this question were presented in Table 14. The frequency of mention of each characteristic in Table 14 can be used as a rough index of the importance of the characteristic, i.e., as a weight to assign to the characteristic for selection purposes. Thus a good cadet would:

⁹This is not to say that the minimum enrollment requirement should be done away with. Cost considerations make it unreasonable, for example, to support a program with only one or two cadets. All we are saying here is that "original numbers" may not be as important as "retained numbers," and that number pressures should not get in the way of cadre's involvement with already enrolled cadets.

¹⁰An accompanying report (Card, J.J. Subgroup Differences in ROTC/Army Career Commitment and in Commitment-Related Attitudes. Palo Alto: American Institutes for Research, 1976) shows that ROTC instructors have a good ability to predict future commitment levels among their cadets. The correlation between ROTC grades and commitment as an Army officer was high.

1. be highly motivated about pursuing an Army officer career	.24 (weight ¹¹)
2. possess other desired personal characteristics such as maturity and dependability	.26
3. possess strong academic abilities	.21
4. be physically fit	.12
5. be a leader	.08
6. have a practical goal orientation	.06
7. be active in campus extracurricular activities	.03

Compare these weights with actual weights used in the Army ROTC scholarship selection procedure:

1. SAT (or ACT) scores	.30 (weight)
2. high school class standing score	.30
3. extracurricular and leadership background	.30
4. personal interview score	.10

One big discrepancy in the two sets of weights is apparent. The theoretical weights assign a full 50% importance to motivation and other personal characteristics. Assuming that the "personal interview" assesses these factors, existing weights give only 10% importance to these motivational and other personal traits. (It should thus not come as a surprise that scholarships are unrelated to career commitment, especially at the Army officer career stage; Card, *et al.*, 1975.)

*It is recommended that existing scholarship award weights be modified to assign greater importance to empirical predictors of motivation and commitment. Correlates of commitment described in Card, *et al.*, 1975 can be used as the starting point for creation of these measures.*

Raising Enrollment Standards: Anticipated Problems and Suggested Solutions

Several findings from the present research effort indicate that the road to "higher quality" recruitment will be very difficult. For example,

¹¹ 24% of responses to the question on most important characteristics of a good cadet centered around this characteristic.

instructors from high-commitment programs felt that problems external to ROTC and generally outside of their control (e.g., general disinterest on the part of their student body, lack of community support for their ROTC program, the general poor image of an Army career, misinformation about ROTC/Army held by the general public) were keeping their program from better meeting its goals.

An accompanying report (Card, 1976) shows that the ROTC/Army career has strongest appeal among the disenfranchised subgroups in U.S. society, e.g., low socioeconomic status, low ability, and low academic-achieving students. The same report also found that the only feature of a ROTC/Army career that was more appealing to high- than to low-ability students was the guaranteed job awaiting the cadet after college graduation. It is recommended that additional research be directed towards finding out what other features of a ROTC/Army career appeal to students who would make potentially good, highly qualified cadets. These features can then be stressed in recruitment advertising and in selection procedures.

Other Recommendations

The study's findings also point to the following suggestions for improving the ROTC program to improve cadets' career commitment:

1. Study the nature of administrative demands on cadre's time, to assess whether these demands--e.g., some paper flow--can be reduced.
2. Continue the development and implementation of physical, extracurricular enrichment activities and mini-courses.
3. Whenever possible, assign officers who have a deep concern/capacity for operating in a learning environment--e.g., officers who enjoy working with students; officers who have advanced academic degrees--to college ROTC programs.
4. Try to have a variety of Army branches represented in a program's instructional staff, to expose cadets to the variety of occupational choices awaiting them in the Army.
5. Bear in mind in all policy decisions that the social climate of an ROTC program--especially the morale of its staff, the time spent with cadets by staff, and the orientation of the program towards its members (instructors; cadets) as opposed to leader (PMS)--is a very potent determinant of cadets' career commitment.

In conclusion, it is hoped that the programmatic research effort represented in the present report as well as in associated reports (Card, et al., 1975; Card, 1976) have (a) contributed towards understanding the determinants of ROTC cadets' career commitment; and (b) provided some insight as to how ROTC/Army can be improved to attract and retain qualified students. It is also hoped that additional research building on these studies' important findings will be pursued.

APPENDIX A

SURVEY ON
ROTC-PROGRAM DETERMINANTS
OF CADETS'
CAREER COMMITMENT
(FORM FOR ROTC INSTRUCTORS)



American Institute for Research
Palo Alto, California

1. Name of school _____

2. Position of person filling out form (check one)

___ Professor of Military Science

___ Other. Please specify _____

PMS's: Please answer items 3-5 in the box below, as well as all other items in the questionnaire.

Other ROTC Instructors: Skip items in the box below, and proceed to Item 6.

3. How many years has your campus ROTC program been in existence? _____

4. How large is your Department of Military Science in terms of:

a. number of instructors, including yourself _____ *

b. number of other (non-instructor) staff members, such as clerks, secretaries, etc. _____

c. number of cadets in Basic ROTC _____

d. number of cadets in Advanced ROTC _____

5. What is the size of your college's/university's student body? _____

*This number should correspond to the number of filled-out questionnaires we will be expecting back from your instructional staff.

6. How many years have you been affiliated with the Army ROTC program? _____

7. What ROTC courses do you teach? _____

8. How many years have you been an Army officer? _____

9. To what extent are you involved in campus activities outside your department?

___ Very much. Which activities? _____

___ Much. Which activities? _____

___ Somewhat

___ Hardly

___ Not at all

10. How would you, personally, rate the following aspects of your Department of Military Science?
Use the following Rating Codes:

1. Exceptional (Top 20% in country)
2. Very Good (Top 40% in country)
3. About Average
4. Below Average (Bottom 40%)
5. Poor (Bottom 20%)

Rating Code

- | | |
|---|----------|
| a. Competence of ROTC teaching staff | a. _____ |
| b. Morale of teaching staff | b. _____ |
| c. Quality of curriculum and materials | c. _____ |
| d. Relevance of curriculum to Army officer career | d. _____ |
| e. Competence of cadets | e. _____ |
| f. Participation by cadets in non-mandatory ROTC-related activities | f. _____ |
| g. Commitment of cadets to Army officer career | g. _____ |
| h. Social climate (comraderie among staff and students) | h. _____ |
| i. Intellectual climate | i. _____ |
| j. Over-all quality of ROTC program | j. _____ |

11. Please explain these ratings by thoughtfully describing the strong and weak points of the following aspects of your department:

- a. Your teaching staff

Strong points

Weak points

- b. Your ROTC curriculum/materials

Strong points

Weak points

c. Your cadets

Strong points

Weak points

d. Your department's social and intellectual climate

Strong points

Weak points

e. The over-all quality of your ROTC program

Strong points

Weak points

12. What is the approximate distribution of cadets' grades in your department's courses?

- a. Percentage of cadets getting A grades _____
- b. Percentage of cadets getting B grades _____
- c. Percentage of cadets getting C's or lower _____

13. How would you describe your department's recruitment efforts this last year?

- ___ Very extensive
- ___ Rather extensive
- ___ Moderate
- ___ Rather limited
- ___ Very limited

14. Please explain your rating by describing what your department did last year by way of Army ROTC recruitment.

15. How would you assess the commitment of your cadets to an Army officer career? Please answer this question by estimating the following percentages. (We realize you can only guess at these numbers. What we want is your best guess.)

- a. Percentage of your cadets in Basic ROTC who, you believe, will join Advanced ROTC _____
- b. Percentage of your cadets in Advanced ROTC who, you believe, will stay in the Army beyond their period of obligated Army service _____
- c. Percentage of your cadets in Advanced ROTC who, you believe, will make a career of the Army (serve at least 10 years in the Army) _____

16. In your opinion, what factors in your ROTC program help produce highly committed cadets and Army officers?

17. In your opinion, what factors in your ROTC program help produce cadets and officers with low commitment to an Army officer career?
18. Are there any aspects of your ROTC program (courses, curriculum, materials, etc.) that you would consider to be innovative, or out of the ordinary? If so, please describe them here.
19. In your opinion, what are the goals of your ROTC program?
20. How well do you think are these goals being met?
- ☐ Exceptionally well
 - ☐ Well
 - ☐ All right
 - ☐ Not too well
 - ☐ Not well at all

21. What factors are keeping your ROTC program from better meeting its goals?

22*. Following are 40 statements about groups. You are to decide which statements are true of your group (of ROTC cadets and instructors) and which are not. If you think the statement is true or mostly True of your group, circle the letter "T" following the statement. If you think the statement is False or mostly False of your group, circle the letter "F" following the statement.

- | | | |
|--|---|---|
| a. There is a feeling of unity and cohesion in this group. | T | F |
| b. The leader (PMS) spends very little time encouraging members (other instructors; cadets). | T | F |
| c. When members disagree with each other, they usually say so. | T | F |
| d. Individual talents are recognized and encouraged in this group. | T | F |
| e. There is very little emphasis on practical tasks in this group. | T | F |
| f. Personal problems are openly talked about. | T | F |
| g. Members are often critical of other members. | T | F |
| h. The activities of the group are carefully planned. | T | F |
| i. This group is run in a pretty loose way. | T | F |
| j. Things are pretty routine in this group most of the time. | T | F |
| k. There is very little group spirit among members. | T | F |
| l. The leader goes out of his way to help members. | T | F |
| m. It's hard to tell how members of this group are feeling. | T | F |
| n. In this group, members are learning to depend more on themselves. | T | F |
| o. This is a down-to-earth, practical group. | T | F |
| p. Members are expected to keep their personal hang-ups out of the group. | T | F |
| q. Members of this group rarely argue. | T | F |
| r. Each member has a clear idea of the group's goals. | T | F |
| s. The leader usually decides what the group will do next. | T | F |
| t. The group does very different things at different times. | T | F |
| u. There is a strong feeling of belongingness in this group. | T | F |
| v. The leader doesn't know the members very well. | T | F |
| w. Members often say the first thing that comes into their minds. | T | F |

*Reproduced by special permission from "The Group Environment Scale" by Rudolf H. Moos and Barrie Humphrey, copyright 1974, published by Consulting Psychologists Press, Inc.

x. Everyone in this group is pretty much the same.	T	F
y. The group rarely has anything concrete to show for its efforts.	T	F
z. Members sometimes tell others about their feelings of self-doubt.	T	F
aa. People in the group sometimes yell at each other.	T	F
bb. It's sometimes hard to tell just what's going on in this group.	T	F
cc. In a disagreement, the leader has the final say.	T	F
dd. New approaches are often tried in this group.	T	F
ee. Members of this group feel close to each other.	T	F
ff. The leader explains things to the group.	T	F
gg. Members show a good deal of caution and self-control in the group.	T	F
hh. Most members "go along with the crowd."	T	F
ii. This is a decision-making group.	T	F
jj. Members sometimes talk about their dreams and ambitions	T	F
kk. Angry feelings are rarely expressed in this group.	T	F
ll. There is a great deal of confusion in this group at times.	T	F
mm. The leader enforces the rules of this group.	T	F
nn. The group feels most comfortable with tried-and-true ways of doing things.	T	F

Questions about School Environment in Relation to ROTC Program

23. How would you assess the political climate of your school?

- ☐ Very conservative
- ☐ Rather conservative
- ☐ Neither conservative nor liberal
- ☐ Rather liberal
- ☐ Very liberal

24. How would you assess student body support of your ROTC program?

- ☐ Strong support
- ☐ Moderate support
- ☐ Neutral
- ☐ Moderate opposition
- ☐ Strong opposition

25. How would you assess administration support of your ROTC program?

- ☐ Strong support
- ☐ Moderate support
- ☐ Neutral
- ☐ Moderate opposition
- ☐ Strong opposition

26. How would you assess faculty support of your ROTC program?

- ☐ Strong support
- ☐ Moderate support
- ☐ Neutral
- ☐ Moderate opposition
- ☐ Strong opposition

27. Have there been any anti-ROTC demonstrations, disturbances, etc. on your campus in the last five years?

☐ Yes, more than one. Please describe. _____

☐ Yes, one. Please describe. _____

☐ No

28. How well integrated is your ROTC program/department with the rest of the school environment? That is to say, does your department function just like any other department in your college/university? Are your instructors considered full-fledged regular faculty members?

- ☐ Department functions exactly like other departments in school.
- ☐ Department functions very similarly to other departments in school.
- ☐ Department is somewhat different from other departments in school. Please describe difference. _____
- ☐ Department is very different from other departments in school. Please describe difference. _____

Questions about Community Environment in Relation to ROTC Program

29. How would you describe the political climate of the community in which your school is located?

- ☐ Very conservative
- ☐ Rather conservative
- ☐ Neither conservative nor liberal
- ☐ Rather liberal
- ☐ Very liberal

30. How would you assess community support for your ROTC program?

- ☐ Strong support
- ☐ Moderate support
- ☐ Neutral
- ☐ Moderate opposition
- ☐ Strong opposition

31. Has there been any movement in the last five years to close down or transfer your school's ROTC program?

☐ Yes Please describe. _____

☐ No

32. Finally we would like to know what you see as being the most important characteristics of a good cadet. That is to say, assume that your Department of Military Science could attract students at will from your school's general student body. What kinds of students would you like to attract into the Army ROTC program? Why?

33. Have we missed anything in this questionnaire? Are there any additional comments you would like to make about potential ROTC-program influences on cadets' commitment?

Thank you so much for your time and effort. Please mail the filled-out questionnaire back to the American Institutes for Research in the enclosed addressed, stamped envelope. And may you have an enjoyable summer!